DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/Ala Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-017508
Date Inspected: 27-Sep-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 1900
OSM Departure Time: 700
Location: Shanghai, China

CWI Name:	See below	**CWI Present:**	☑ Yes ☐ No
Inspected CWI report:	☐ Yes ☑ No ☐ N/A	**Rod Oven in Use:**	☑ Yes ☐ No ☐ N/A
Electrode to specification:	☑ Yes ☐ No ☐ N/A	**Weld Procedures Followed:**	☑ Yes ☐ No ☐ N/A
Qualified Welders:	☑ Yes ☐ No ☐ N/A	**Verified Joint Fit-up:**	☐ Yes ☑ No ☐ N/A
Approved Drawings:	☑ Yes ☐ No ☐ N/A	**Approved WPS:**	☑ Yes ☐ No ☐ N/A
		Delayed / Cancelled:	☐ Yes ☑ No ☐ N/A

Bridge No: 34-0006
Component: Tower and OBG Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 11
This QA Inspector randomly observed the following work in progress in Bay 11:

SMAW tack welding of weld joints BK004A8-018-105, BK004A8-018-107, BK004A8-021-109 located on PCMK BK004A8-018, BK004A8-021, side plate and deck plate to stiffener plate. Welder was identified as 052641. QC was identified as ZPMC CWI Qiu Wen (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Mao Bin Bin (QCA1), who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-P-2112, WPS-B-P-2113.

SMAW repair welding of weld joint WSD1-TL5-4B/F-14B located on PCMK west tower, lift 5, internal connection plates. Welder was identified as 066261. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-485-SMAW-3G(3F)-repair as listed on ZPMC Weld Repair Report T-WR3649 attached to ZPMC Ultrasonic Testing Report T787-UT-3249 as presented to this QA Inspector and verbalized by QCA1.

SMAW repair welding of weld joint WSD1-TL5-4E/F-1A located on PCMK west tower, lift 5, internal connection plates. Welder was identified as 037996. QC was identified as QC1. Assisting QC1 at this location and

appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-485-SMAW-3G(3F)-repair as listed on ZPMC Weld Repair Report T-WR3653 attached to ZPMC Ultrasonic Testing Report T787-UT-3249 as presented to this QA Inspector and verbalized by QCA1.

SMAW repair welding of weld joint ESD1-TL5-2E/F-1A located on PCMK east tower, lift 5, internal connection plates. Welder was identified as 040690. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-485-SMAW-3G(3F)-repair as listed on ZPMC Weld Repair Report T-WR3667 attached to ZPMC Ultrasonic Testing Report T787-UT-3251 as presented to this QA Inspector and verbalized by QCA1. See photo below of the preheat temperature of the repair area being tested at 180°C, actually above the 160°C required by the above noted WPS.

SMAW repair welding of weld joint ESD1-TL5-2E/F-20 located on PCMK east tower, lift 5, internal connection plates. Welder was identified as 040723. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-485-SMAW-3G(3F)-repair as listed on ZPMC Weld Repair Report T-WR3663 attached to ZPMC Ultrasonic Testing Report T787-UT-3251 as presented to this QA Inspector and verbalized by QCA1.

Bay 10
This QA Inspector randomly observed no apparent welding work in progress in Bay 10.

Heavy Dock
This QA Inspector randomly observed the following on the Heavy Dock:

No apparent welding related work was being performed on the Heavy Dock. All 4 towers' lift 3 were connected and positioned vertically on a base pedestal at end of the Heavy Dock. East, south, west, and north towers, lift 4 were positioned on top of east, south, west, and north towers, lift 3, respectively, on the Heavy Dock. The ZPMC 4000 ton and 1300 ton floating cranes were moored at or near the end of the Heavy Dock and sitting idle.

OBG Trial Assembly Area
This QA Inspector randomly observed the following work in progress in the Trial Assembly Area:

SMAW tack welding of weld joint CA82A located on OBG 11AE at the 11AE/11BE transverse weld joint, north (crossbeam) side, side plate to edge plate holdback weld. Welder was identified as 205616. QC was identified as ZPMC CWI Liu Hua Jie (QC2). Welding variables recorded by QC2 appeared to comply with WPS-B-P-2112-TC-U4b-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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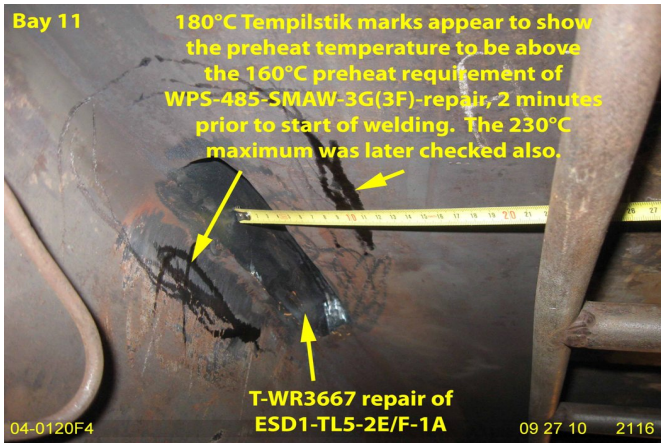

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer